THE VETERINARY RECORD

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EDITED BY WILLIAM HUNTING, F.R.C.V.S.

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THE DIAGNOSIS OF PLEURO-PNEUMONIA

We noticed a few weeks ago that the condition of the lungs of some imported American cattle had given rise to a controversy. The veterinary inspectors considered the appearances indicative of contagious pleuro-pneumonia. Professor Brown recognised the lung changes as similar to those seen in British stock suffering from "the lung disease," and his opinion was supported by other authorities. On the other hand Mr. Wray, a United Statss veterinary surgeon denies that the disease is our "lung disease," and says it is merely a sporadic affection indigenous to his own country. He is supported by Professors Williams and Bowhill. Professor Williams offered to demonstrate the microscopical differences between the two diseases to any body of veterinary experts. *The North British Agriculturist*, for some reason or other, has pinned its faith on Professor Williams' infallibility, and about a fortnight since indulged in a little ecstacy over what it imagined was corroboration of the Professor's views. It also asserted that no one had ventured to take up Professor Williams' challenge. The North of England V.M.S. has now offered an opportunity at their next meeting for a full discussion of the subject. They have invited Professors Williams and McFadyean to produce specimens of, and give demonstrations on the lungs of both the "American Disease" and the ordinary Pleuro-pneumonia. We hope the demonstrations will be given, and that some facts will be brought forward to settle the question in dispute. Its interest is not greater than its importance.

VETERINARY ELECTORAL DISTRICTS.

Most men probably imagine that the notion of dividing the country into veterinary electoral districts for the selection of Members of Council had ceased to be a subject for discussion. It has never been shown what territorial interests exist in the veterinary profession or why any definite number of Councilmen should per force be selected from a certain district. The notion was first mooted many years ago by a practitioner in Scotland, and excuse was then generally accepted that it was the effect of misdirected national sentiment and would soon subside. It has again revived, and this time comes from Carlisle, where Mr. Rutherford submitted it to the Border Counties V.M.A. under the disguise of "a more equitable representation of the profession on the Council." Mr. Campbell supported Mr. Rutherford and said "was quite possible to divide Scotland into districts and let each district have a representative." How many districts would he make, and upon what basis would the division be made?

There are 2734 Members of the College; and there are 30 Members of Council—*i.e.* one representative to every 90 members. If we take the divisions on the Register we find the members number as follows and can calculate the proportion of representatives.

England	1683	—	18	Representatives.
Scotland	443	—	5	,,
Ireland	221	—	3	,,
Foreign	163	—	1	,,
Army	161	—	2	,,
Wales	63	—	1	,,

This, we think, would be as fair a division as could be made, and it is remarkable that, as far as Scotland is concerned. very little change would be effected unless the electors preferred to send practitioners instead of professors to the Council. If it ever should come about that our small profession were divided into five or six separate sections for electoral purposes, the Army would certainly ask for its direct representation. The members resident abroad would also have a claim, and probably a further division into town and country practitioners would be insisted on. One thing is certain—that if we had to select our men upon local considerations we should soon have a Council more remarkable for its narrow prejudices than for its professional *esprit*, and we should have a number of cliques incapable of united action. Just as we have succeeded in revolutionising the Council, and infusing into it a large proportion of new blood, it does seem anomalous to hear a cry for sub-division, and petty districts. Fortunately the notion is as thoroughly impracticable as it is utterly unnecessary.

ABORTION FROM FRIGHT

A correspondent asks us to submit to the members this question –Is abortion in the mare ever caused by fright, and if so would it follow the cause in about a fortnight or a month? Or say, if a number of mares feeding in a field were attacked by an escaped lion and one killed and the others frightened, would any abortions which followed in the course of the next three or four weeks be fairly credited to the fright. Or, another case, if half-a-dozen mares wandered on to a railway line and the train passed through them—killing, wounding and frightening them, would abortion of the survivors be due to the fright and shock if it did not occur for five weeks? Of course we all have opinions on such cases, and probably all would say the abortion was the direct result of the fright; but are there any observed facts of an analogous kind, and what is the usual time which elapses between the accident and the abortion? We should be glad of any information.

CASES AND ARTICLES.

SPASM OF THE DIAPHRAGM.

By Professor F. Smith, A.V.D.

Some excellent cases were recorded in your Journal a month or two ago as "Spasm of the Diaphragm," and in at least one series the pulse, respirations, and temperature of the patient are recorded, and, what is of more importance for the subject under consideration, the number of beatings or internal thumpings is given. On comparing the latter with the respirations one is struck by the remarkable difference which exists between the breathing and the thumping.

Breathing 50 per minute. Thumping 90 per minute.
" 14 " " " 90 " "
" (not recorded) " 80 " "

The diaphragm is a muscle of inspiration, and one of the principle concerned in the process, and I therefore cannot help asking myself the question, if it is contracting 90 times per minute how is it possible for the breathing to be as low as 50 or 14?

I must at once state that the object of this note is not to criticise but rather to excite discussion, for I am not sure whether we understand the significance of this thumping, or rightly interpret the cause of the sound.

One writer lays stress upon the noise being confined to one side, the left, and having had a case several years ago of "internal thumping" I looked at my notes and found that in this case the noise was much more marked on the near than on the off side, but I regret I cannot find any mention of the respiration nor of the number of "thumps" per minute.

The noise is peculiar; once heard is never forgotten I certainly thought my case would die the distress was so intense, but after a day or two the attack passed off as suddenly as it came on. Had it not been for the above record of "respiration" and "thumping" I should still have been under the impression that my case was one of spasm of the diaphragm, but I now begin to doubt it, for if the contractions of the diaphragm were 90 per minute the breathing should be 90 also.

Hiccough is defined as an involuntary sudden inspiratory effort followed by closure of the glottis, the peculiar noise which accompanies it being produced by the incoming column of air impinging upon a suddenly closed glottis, and the noise is obviously referred to the larnyx. But in the case of the horse, though identical conditions are supposed to be in operation, yet the noise instead of being referred to the throat is produced inside the animal, evidently more on the left side than on the right, a peculiar thumping sound which can be heard some distance from the patient, and accompanied by such acute distress that life certainly appears in danger. Can this be hiccough?

By careful clinical observation we will, in due course, be able to settle this point in pathology, but it behoves us to record all cases met with in the future, particularly bearing in mind to observe the respirations, pulse, and number of "thumpings" per minute.

In my case the internal thumping was synchronous with the pulse, and in the future I will carefully observe to see how far the heart may be responsible for the noise in question.

I am sure we are all most indebted to those gentlemen who have placed on record these interesting cases.

A UTERINE TRUSS.

Some time since it occurred to my mind that a better arrangement might be made in treating cases of prolapsus uteri in our bovine patients other than the old-fashioned method of sewing up the labia.

The accompanying woodcut represents an instrument used by myself with success, it was made by Messrs Arnold & Son.

I find that it is necessary to tie *rather tightly* by *strong* cords, from *a a* to a strap around the body of the cow just in front of the hind legs This is kept in position for ten days or a fortnight. It is necessary to select a short or long pessary according to the size and breed of the patient. This will also vary as the uterus advances towards its normal condition.

R. Dawson, V.S.

THE EXPANSION OF THE FOOT.

Any contribution to this vexed question which is based upon careful and well conducted experiments cannot be overlooked. In the last number of *The Journal of Comparative Pathology* Professor McFadyean gives us a translation of an article by A. Lungwitz, of Dresden, from which we gather that Förmger, of Augsburg, had adopted an electrical apparatus to determine the movements of the hoof during progression, and had arrived at the conclusion that "when weight was thrown upon the foot the hoof became dilated at the heels, both at its coronary and solar edge, and that the sole at the same time sinks." In Britain it has generally been supposed that the hoof does not alter in form, except that a slight expansion at the coronary edge of the heels may happen. That the sole descends when weight is thrown on the foot has been denied by every one except, perhaps, Mr. Miles, who obtained

a prize some years ago from the Bath and West of England Agricultural Society for an essay on shoeing, in which that theory was advanced. In recent times, Professor Smith, of Aldershot, has been the champion of expansion and had, independent of continental authorities, carried out some experiments with an electrical apparatus. Unfortunately his results have not been published, and we do not quite know either the arrangement of his mechanism or the result of his experiments. We believe that he satisfied himself that expansion occurs, and that before the appearance of that article, he had determined to publish his experiments. We hope he may yet let us know his results.*

To return to Lungwitz, we may first give a rough idea of his apparatus. He uses a battery with wires leading to a bell—much the same sort of arrangement as is found in the ordinary domestic electric bells. The battery may be fixed if the experiments are only made on a horse standing in a building, or may be carried by the rider or in a conveyance if the results given during locomotion are desired. One wire of the battery is carried to the shoe and the other to any point of the foot which has to be tested. By means of a bar on the solar surface or an angle on the circumference of the shoe a screw can be carried and this screw set to any distance from the part of the hoof tested. If one wire be connected with this screw and the other wire carried to a small metal stud inserted in the hoof, it only wants the two to be approximated to cause a coutact and then the bell rings. If the foot be raised from the ground and the screw is brought in contact with the stud the bell rings. By moving the screw back contact ceases, and the bell is silent. When the screw is drawn slightly away from the stud the foot is placed upon the ground, and if any expansion takes place the two points are brought into contact and the bell rings; the distance apart of the screw and the stud marking the amount of expansion. So far the apparatus seems calculated to give exact results, and the experiments detailed seem to have been carefully performed, so that until some other investigator obtains different results we cannot deny the conclusions arrived at, especially as the operator had witnesses of repute present at most of his experiments.

It is unnecessary to detail all the experiments and we shall quote the summary.

"The foregoing experiments, which are being continued, make no claim to explaining in all respects the changes of form of the hoof under the action of the body-weight. For that purpose they are not yet sufficiently numerous. But at the same time they are fitted to explain the nature of the hoof mechanism, and the method of investigation may be regarded as the best known up to the present time. The experiments in the first place, confirm the elasticity of the horn capsule; they prove further that the changes of form of the hoof are produced by the natural weighting of the foot, and that these are most pronounced at the moment of strongest over-extension of the fetlock joint.

They consist—

1. In lateral expansion of the hoof over the whole area of the heels.
2. In a contraction of the coronary edge in the anterior half of the hoof.
3. In a diminution of the height of the horny envelope simultaneously with a sinking of the bulbs of the heel.
4. In a flattening (sinking) of the horny sole.

The changes of form mentioned occur simultaneously, and are more marked on that half of the hoof which receives the greater share of weight than on the other.

An extensive range of movement does not here come into consideration, for minimal changes of form suffice to excite and promote the blood circulation; but it may be mentioned in passing that the measurements obtained almost correspond with those which I had found in experiments with the hoof ektasimeter, and other means of measurement. But it does concern the nature of the hoof mechanism, and in this respect the results of the investigation correspond more or less closely with those obtained by others, especially with those of Bayer."

Some of the changes in the foot we accept without any reserve. It is just what we should expect to find that extra weight placed on a foot should alter the contour of the coronet. When the fetlock moves forward we should expect some bulging of the front part of the coronet; when it moves backward—as it does when weight is placed upon the oblique suffraginis—we should expect bulging of the back part of the coronet. These movements are shown to occur, and also another which might be overlooked but which is clearly a corollary of the others, viz., contraction of the front of the coronet when the posterior portion bulges or is expanded. What we do not understand is the flattening of the arch of the sole, and we shall preserve a respectful scepticism until more experiments are made. We see no way of accounting for any fallacy in the apparatus, but we cannot understand how the anterior portion of the sole can in any way perform a downward movement. As to the expansion of the solar edge of the wall we are not yet satisfied. The experimenter only claims that this expansion is slight—in his own words "about equal to the thickness of a sheet of paper." Is it possible that the slight deviation may have been due to some defect in the apparatus? The account of the experiments does not minutely describe the bearing surface of the foot, nor the bearing surface of the shoe, and it is possible that defects in either might permit sufficient movement to invalidate the results.

Of course the importance of the physiology of the foot lies in its application to shoeing, and it may be that the electrical apparatus will afford some help in establishing sound principles of farriery. This point is fully grasped by Prof. Lungwitz, who says:

Conclusions regarding practical shoeing.—"The experiments prove anew that shoeing impedes or alters the hoof mechanism. The open common shoe is not yet the proper agent for protecting the

* Since this was written a communication is to hand from Professor Smith, with description and photographs of his apparatus, which we hope to reproduce next week.

hoof, because it diminishes or abolishes the counter-pressure on the horny sole and frog, and thus does not allow the complete evolution of the expansion of the heels at their solar edge. A shoe which does not possess this drawback is the modified Charlier shoe; this certainty is not adapted for all conditions, but nevertheless it is to be wished that it were more frequently brought into use than has hitherto been the case, where the character of the ground and the nature of the work admit."

The whole article will bear careful reading, and should not be missed by any veterinarian.

VETERINARY SOCIETIES.

NATIONAL VETERINARY ASSOCIATION,

Meeting at Doncaster, July 1891, Prof. Axe in the chair.

INFLUENZA.

By Principal Williams, New Veterinary College, Edinburgh.

DISCUSSION.

(Continued from page 241.)

Mr. Bowhill :—The author says that the disease can be transmitted by the stallion to the mare by the act of coition. I noticed a case where a stallion had pink eye or influenza and was cured in about two weeks, and received a veterinary certificate that he was fit to travel the district. He came to a farm where a mare and a foal, and another mare were in the pasture; no other animal had been in and they had not been out, and no animal had been off the place to any distance for over ten days. The mare was covered. Exactly seven days after the farmer said, "Will you look at this mare." I found her with eyes swollen and other symptoms. Nine other cases have been traced to the same stallion. This stallion was put into a stall and stood there for three or four hours. Another stallion, in the habit of coming and standing at the same place, was put into this stall one night. The next day he missed his round, and the next week he was also affected. Mr. Hunting has referred to horse boxes, and I think it is time, seeing that so much money is spent in disinfecting cattle trucks, that something should be done to the horse boxes. Suppose I take a valuable hunter to a fair, or buy one. The horse boxes may have had in them a whole lot of Danish colts which have been diseased. The boxes are not washed out; they are shoved on the siding, sometimes not even swept out. You bring up a valuable hunter, you put him into the box, and in four, five, or eight days he is affected. I think it is time that the attention of the Government was called to the fact that horse boxes should be cleansed as well as cattle trucks considering the amount we pay for the transport of horses. Then with regard to the moss litter. I have always objected to moss litter in this disease, from the fact that we have not been able to make an exact cultivation of the so-called microbes from influenza; but other microbes can be grown in urine, which will act as a medium, and under those conditions I have always considered that where the urine is mixed with any albuminoid structures amongst the moss litter it may set up a nidus, and the germ might propagate there and so keep the place contaminated.

Mr. Hunting (Sen) :—I am a very great advocate for moss litter. I have used it in hundreds of cases, and I continued to use it all through this outbreak and through several others. I have never seen a single instance where the disease has been worse where moss litter has been used than where other litter has been employed.

Mr. Hedley :—It would perhaps be a matter of considerable pleasure to Mr. Bowhill to know that there is a clause in the Order which distinctly lays down that a horse-box must be cleansed and disinfected; and if he uses one for his horse that is not cleansed and disinfected he is as much at fault as the railway company that supplies the truck.

The President :—With regard to moss litter, I have had opportunities of observation during recent outbreaks of influenza, and I must confess that where the malady has assumed its most virulent type, there moss litter has been employed. Of course one does not draw hasty conclusions from this fact, but there is the fact. What the interpretation or explanation would be it would be interesting to know. I was very much struck with the comparison of the small mortality and the small prevalence of the disease which obtained in a large number of animals referred to by Mr. Hunting, Sen., as compared with the prevalence of disease and the mortality existing in the stables of large contractors and railway companies. It appears that the very large studs which are under the care, I believe, of Mr. Hunting, have suffered in a very small degree, and the prevalence of the malady has been equally small; while, on the other hand, in studs of very much smaller dimensions, under the management of railway companies and others similarly situated, the extent of the disease has been very considerable, and the mortality large. Mr. Hunting has struck the keynote of the explanation when he says that isolation is the great secret of the difference, and there is no question about that. Just let us see in what position we are in when dealing with a stud belonging to a large railway company or contractor. The disease breaks out in, say, 20 or 30 animals in a stud of something like 150 or 200. What is the consequence? These 20 or 30 animals entail increased work on the remainder of the stud—their place is not supplied. The consequence is we have the other animals run, as it were, off their legs; they are tired, distressed, and they become, I apprehend, more receptive of virus. You will say it is no question of receptivity. It is not, if you can isolate the disease but it happens that you cannot. There is no provision or isolating disease. In the stud to which Mr. Hunting referred, the animals could not be isolated; the whole space available for isolation was taken up, with the result that sick animals had to remain in the stables with the healthy ones. In Mr. Hunting's stud a different *régime* prevails. He is able to place his sick animals far away from the healthy ones. He has all the conditions of pretty well complete isolation. Not only so, but he has full control over the men and the things—the vessels and utensils of the stable; and no doubt he has a rigid, almost military, system of dealing with studs under his care; but this complete isolation, and this replacement of sick animals as they fail to take their share of the work which they were doing antecedent to the outbreak, is utterly impossible in the large studs of railway contractors and others, and that to my mind explains in great measure the extra mortality on the one hand as compared with that upon the other. I have recently been engaged in investigating an outbreak of this disease in a very large stud in London, and making suggestions as to the stables. A great mortality had occurred in this particular stud, and a very full and complete explanation of that mortality was forthcoming. The young animals from the country as they came in were stricken. The consequence was they could do no work. The

strength of the other animals was sapped by doing double work. Not only so but the stables were in a badly ventilated condition, badly drained, the pavement of a most indifferent character, and indeed the sanitary and hygienic arrangements of the establishment were bad, and altogether unfitted for the healthy condition of an animal. That is, I apprehend, the explanation between the greater prevalence of disease in the one case and its greater mortality as compared with the other, namely, the fact that on the one hand complete isolation is possible, and on the other hand it is insufficiently carried out.

Prof. WALLEY:—I myself have been in the habit of differentiating three forms of epizootic influenza—namely, effusive catarrhal fever, and what I call bilious fever, and I hold that the cases spoken of by Dr. Fleming were practically what I call bilious fever, with which you have very commonly lung complications. I hold that catarrhal fever is as different from cellulitis as epizootic cellulitis is from bilious fever, and that the whole three are as different from each other as are any two diseases with which we have to deal. I cannot go as far back as Professor Williams, but I remember in my first year of pupilage Mr. Kettle showed me a case which he said was a typical case of old-fashioned influenza, and that he remembered it as long as he remembered anything in the profession. As to the etiology, Professor Williams makes a statement in reference to its occurring in isolated places where contact was out of the question, and he quotes its appearance in the Lothians, and a few days afterwards at Edinburgh. That was in 1880. I have, I believe, an explanation of this matter. On, I may say, three different occasions, influenza was introduced into Edinburgh by a travelling menagerie, and I am safe in saying that in the years referred to these people were the first to bring the disease from the North of England, as they had done on other occasions. With reference to its contagious and infectious character, I am very pleased to find that the old adage that "Time brings its revenge," is true. Years ago I held that it was infectious, and I advised the local authorities of the city to close the water-troughs. I was found fault with for doing that, but I am very pleased indeed to find that Mr. Rutherford has altered his mind on that point, and that he was the first man, barring myself, who wrote to the local authorities at the last outbreak requesting them to close the water-troughs. Professor Williams says the horse seldom has a second attack during the same outbreak, but are we to look at all the cases we get where a horse gets well apparently and to work, and after several weeks comes back with another distinct attack; are we to look upon these as cases of relapse, or are they second attacks? I think it is a very difficult question to answer, and in my experience that has been a very common occurrence. As to the mortality, Mr. Hunting (sen.) referred to a case with which I am perfectly acquainted because I was consulted about it, and I must confess that a more startling case I never saw in my life. Animals were never under better conditions. There was no peat-moss used. It was straw, but the cases were something frightful. It was no case of simple fever such as one gets in light horses, and that class of horse, but they were the worst cases a man could possibly imagine, and whether you gave them medicine, stimulants, or whatever you did, nothing seemed to have any effect in staying the ravages of the disease. We cannot draw conclusions as to the mortality from the statements of any one man, or any half-dozen men; you must have the same conditions in each case, and given the same conditions, the same class of horses, the same kind of work, the same treatment, and half a dozen men treating them; then you may contrast these men's treatment. I have come myself to treat my cases of influenza on totally different lines from those I adopted years ago. I found that some of the animals could not stand still one minute, and that they would lie down in spite of you and fight until they were exhausted if they were not put in slings—animals that positively groaned in moving and became exhausted very quickly. I determined in one case to put a pony under the influence of chloral hydrate, opium, and nitric ether. The effect was simply marvellous. I had no complications to deal with, and he was certainly one of the worst cases I had. I followed up this kind of treatment afterwards with the very best possible results. What is the explanation? I maintain that the fever germs entablish a large amount of excitement in the great nerve centres, and that if you control those nerve centres, and prevent them wearing themselves out, you give the animal a better chance of recovery and avoid complications; but if those nerve centres become exhausted, as, for example, the cardiac, the respiratory, and the vaso-motor centres, what happens? Either the heart begins to act irregularly and you get *ante-mortem* clotting and death, or you get congestion of the lungs followed by a low type of inflammatory action, or breaking up of the lungs, and death; or in the case of the vaso-motor centres you get exhaustion and also congestion of various vascular organs. Here comes in again the element of septicity. In some cases we had not one death due at all to the disease, but to septic results—septicæmia—septic decomposition and breaking up of the lungs and septic inflammation of the bowels. If you can only prevent exhausting the nerve centres, and keep the vital power of the animal up in that respect, and help in other ways, the possibility is that you get no septicæmia; but when your animal is exhausted septic diseases arise, and your horse dies in spite of you. I will not go into the question of stimulants or no stimulants, but I say you have no right to put your foot on any special form of treatment. In simple cases you want very little treatment indeed. In bad cases, in my opinion, you do wrong if you do not keep them supported, and the great mistake is made in not giving stimulants accompanied by nutrients. If you give whiskey you ought not to give it without milk, and if necessary eggs and similar materials; but to give a lot of drugs and keep the animal under their influence, without at the same time giving him proper pabulum in the way of nutrient matter, is wrong. In reference to the pulmonary fever, I have had in several stables a series of cases of fever associated with pulmonary disease, and followed by consolidation of lung. I look upon those cases as totally apart from influenza, and also as contagious. I remember one cab stable where we had two dozen horses affected in this way. There again I treat them very much in the same fashion. If they become weak, I go in for stimulants; if, on the contrary, they do not seem to require it, I do not give stimulants. With regard to the paragraph in which the author speaks of counter-irritants as "elevating the temperature, increasing the respiratory movements and action of the heart, and by inducing a blocking-up of the lymph stream preventing the absorbtion of the inflammatory products"—let us just enquire what lymph stream this is. Have the lymph streams of the skin anything to do with the lymph streams of the lungs? I see no connection between them.

Prof. MCFADYEAN:—This debate is essentially a clinical one. The paper, however, is partly pathological, and my remarks will be directed to the pathological problems touched upon. In the first place I wish to draw attention to the paragraph where the author says: "The pleuro-pneumonia of the ox follows the great lines of commerce, and can be traced from place to place with a certain degree of exactitude." If Prof. Williams can trace pleuro-pneumonia along the great lines of commerce with any degree of exactitude I think Prof. Brown ought to consult him immediately, and he ought to be

made a permanent member of the Board of Agriculture. He adds, "I am therefore forced to the conclusion that like Roman and typhoid fevers in man, this disease, arising as it does from the entrance of a microbe into the animal system, is not due so much to that germ itself, but to certain properties which it has obtained from perhaps unknown conditions of the air; that the germ itself is constant in the surroundings of animals and under ordinary conditions quite innocuous, but let these conditions be altered, the properties of the germ become virulent and infective." It strikes me that that is a hypothesis which asks us to believe a great deal more than is proved by anything that we know from observation or experiment. Where we have a choice between two theories to account for observed facts we ought to prefer the simpler one, and I hold entirely with the view indicated in the criticisms offered by Mr. Hunting. The simplest explanation of what we know regarding the spread of influenza is to assume that it arises from infection, and from infection alone. I mark with satisfaction that during the last half-dozen years Prof. Williams himself has made a distinct advance, for I recollect that when this subject was discussed previously he denied that contagion or infection had anything to do with the spread of influenza. I hope on the next occasion he will admit that it is spread by contagion or infection, and by that alone. In the next sentence, the author says, "There are several examples of the so-called spontaneous development of an afterwards contagious disease," tetanus and anthrax being cited. That struck me as a most remarkable statement, for I had been in the habit of believing that if bacteriologists agreed upon any one point it was that anthrax does not arise spontaneously. He now tells us that he meant by spontaneity merely that the infection arose in that case not from the animal being brought into contact with one suffering from the disease. But if the Professor admits, and I think this would be the simplest explanation, that the germ of influenza may have a condition, let us say, of spore, in which it may retain its vitality, that would account for the whole circumstances. One speaker cited a case, and I do not doubt it, in which a stallion apparently healthy was capable of propagating the disease. How do you know that that does not apply to geldings also? And if you admit that geldings and mares apparently healthy are capable of spreading the disease, that meets altogether the contention that the disease sometimes arises spontaneously. I dissent from the statement here made that tetanus is a disease which arises spontaneously, and also from the view that these diseases, tetanus and influenza, are at all comparable. We know a great deal about the organism of tetanus. Tetanus is a disease caused by a germ not exactly of ubiquitous distribution, but found widely in nature. That is not a mere statement that cannot be supported by any proof. There are known soils from which we can produce tetanus by taking a certain quantity of the soil and inoculating it into an animal. Let Prof. Willams support his contention that the organism of influenza is ubiquitous by taking some material and producing influenza, when the possibility of infection from an animal previously attacked is excluded. I am inclined, also, to blame the author for having stated that pulmonary fever is probably due to a microbe, the nature of which has not been determined; and I want to ask him to explain why he passed over the exceedingly interesting and prolonged investigations of Prof. Schultz with regard to pulmonary fever. Schultz showed that the microbe was found in all the cases of pulmonary fever that he examined. He produced pulmonary fever by injecting it into animals, and I want to know why no mention of that is made in the paper. Lastly, I would ask whether this is not a mis-statement regarding the size of the organism. Is this organism one 2400th part of an inch in diameter?

Prof. WILLIAMS:—It is a printer's mistake, it should be 1/24000.

Prof. MCFADYEAN:—I think it is exceedingly unfortunate that that mistake was not corrected. This paper has been in print for three months. I read it in the Transactions of the Highland Agricultural Society, and I submit that it would be almost worth while to reprint it rather than to send it to other countries containing such a glaring error.

Mr. CAMPBELL:—With regard to the transmission of the disease by stallions, I remember a conversation I had once with Mr. Robinson. There was a horse that travelled in the Bate district, and Mr. Robinson, of Greenock and his son went across the water and examined a few mares that had been covered by this horse. They were found with pink-eye and considerable swelling of the abdomen, eyes and mouth. The same horse came over to the district of Kirkcudbright a year afterwards, and my attention was then called to a number of mares that it had served, the result being that many of them had a swelling of the head, eyes, and legs, and some of them being very stiff for about four or five days. I call attention to this fact, that another three-year-old horse that never had had pink eye, and never was in contact with this horse or any animal that ever had had pink eye, produced the same effect on a number of mares. I saw that horse, and I came to the conclusion that it had no relation to pink eye, but was another malady altogether.

Prof. WILLIAMS (in reply): I rather expected my paper would have been more the subject of criticism than myself. A great deal that I had written, as I thought, with the best intention, was held up by the gentleman who opened the discussion to ridicule. He ridiculed first of all the discovery of the microbe, then he ridiculed the microbe itself and various other matters; he placed me between two stools, and says I have come to grief between them. However, gentlemen, I confess I hold an opinion which tallies with two schools of thought upon the question of the origin of disease. I gave you the result of my own experience, what I believed to be true, and I have had a long experience in influenza. I did not draw my conclusion from the last outbreak alone, but they are verified from the experience of about 40 years. The first appearance of an outbreak of influenza has seemed to me to be disconnected with any contagion. I remember the time before railways when horses were much more isolated than they are now, and I can remember then that an outbreak of influenza was similar to what it is at the present, appearing here, there, and everywhere in the course of a few hours. It is all very well for Mr. Hunting to say you cannot prove that it has not been taken to a certain place. The thing appears in a village; in the course of a few hours, if there are several farms in the village, there is influenza all over the place; it appears in half a dozen places in two or three days. It has never been brought. It is all very well to put the onus of proof upon us that there has been no importation, but we put the proof upon you. There has been no diseased animal brought into that district. How has the disease broken out? I can only repeat that this is due to a something, a change that has taken place in a material which is always present in the air, that it assumes certain properties under certain conditions of the atmosphere. We have several dozen cases on hand one day in Edinburgh, and in a week afterwards there is not a single case. We have been free from it in Edinburgh for weeks since I have been from home. My son writes to me that pink eye has appeared in isolated places. One day we had not a single case of pink eye, the next morning it was all over the place. Do you mean to tell me that this disease has been conveyed to all those places? I cannot believe it; it is that the same conditions of atmosphere prevail all over these places, therefore the horses that were apparently

well one day had the disease the next morning. Mr. Hunting says it does follow the line of traffic, and he defies me upon the question of pleuro-pneumonia. Can I trace an outbreak of pleuro-pneumonia to a line of traffic? Not now, I cannot; but when pleuro-pneumonia first appears in a district you can easily detect it along the line of traffic. When a disease first breaks out, if it is of a contagious nature, you can trace it along the line of traffic, but after it has been domiciled in a country or district you cannot trace the outbreak here or there, because you are surrounded with it. I therefore maintain that the argument brought forward by Mr. Hunting has no weight whatever. You have all seen an outbreak of anthrax upon an isolated farm, the cattle not being in contact with other cattle. It does not seem like a contagious disease. The deaths occur upon this spot, and there has been no communication with any other place, in fact I have known it without anthrax being within ten miles. What would you call the reason of that outbreak? I do not say for a moment that the germs originated spontaneously, but what can you call it but a spontaneous outbreak? There is no contact; you cannot say it is brought by a diseased animal, that it is due to contagion; it is due to a bacillus certainly being there, but in a way which I cannot explain. Therefore, understand me, I do not say they are living things which can come except through other living things. This disease depends upon this microbe, and I grant you for the sake of argument that pulmonary fever also depends upon a microbe in the series of changes. It is true that a portion of this paper has been already printed for the Highland Society. I was not aware that there was this mistake about the size of the microbe. My printer is, like other human beings, subject to making mistakes. I have endeavoured to cultivate the microbe from pulmonary fever for a number of years I must confess that I could never succeed in getting such pure cultivation as to satisfy me that I could fix upon the microbe. But this is not the first cultivation by any means. Many years ago I cultivated the same thing though I never said a word about it, because I was not certain in my own mind. I felt, however, fairly positive that it is really the first cause of the disease. Now, as to the treatment of this disease, whether it is to be divided into three, or whether it is one disease. Prof. Walley asks about the administration of stimulants, but he knows as well as I do, many years ago, when we were associated together, that I objected entirely to the treatment by stimulants. This thing has been forced upon me during a long career. Having witnessed carefully the results of various treatments in this disease, the conclusion I have come to, although Mr. Rutherford said that I recommended about a dozen medicines, is that we require very few, but they should be very carefully selected. As to doing anything heroic, I have stated in my paper my reasons against the administration of stimulants; they certainly would lower the temperature—a good dose of an alcoholic stimulant will take down the temperature two degrees—and I have explained how it does take down that temperature. But what does it do? There are changes going on in the system after this virulent matter has been introduced, and the condition of fever is simply the result of the operation of this matter upon the economy, and the series of changes that occur are simply the effort of Nature to throw off the cause of the disease. The disease is a physiological process, and unless you understand that I do not think you can comprehend the proper treatment of the disease, and the less you interfere with that physiological process the better. I therefore never use stimulants. Gentlemen, I thank you for your patience.

Votes of thanks were then given to the "Writers of Papers," the "Provisional Committee," and to "The President."

ROYAL VET. COLLEGE.
VETERINARY MEDICAL ASSOCIATION.

The Ninth Annual General Meeting of the above Society was held in the Theatre, on Wednesday October 28th, at 6.30 p.m. The Annual Report and Prize List was read and the Meeting then proceeded to elect the officers for the ensuing Session. Mr. Wild was elected President; Prof. Shave re-elected Treasurer and Mr. F. W. Wilson as Hon. Secretary.

Six Vice-presidents were elected by the Members, and after a vote of thanks to the retiring officers the proceedings terminated.

F. Hobday, *Assist. Sec.*

COMPENSATION FOR FARCIED HORSES.
Meeting of Horse Owners.

On Friday night, the 30th ult., a well attended preliminary meeting of horse-owners was held in the Boardroom at the Animals' Institute, Kinnerton Street, Wilton Place, S.W., "to consider the question of memorialising Government in favour of such alteration of the Contagious Diseases (Animals) Act as will lead to the stamping out of glanders, and the treatment of owners of horses in the same manner as the owners of cattle, viz., compensating them for the destruction of their property." Colonel C. F. Colville, Chairman of the London Road Car Company, presided; and amongst those present were Messrs. John Atkinson, J. Manley Birch (Contractor Royal Mails), T. S. Price, J.W. Dollar, J. Scott (London Improved Cab Company), McGill, F. R.C.V.S. (London Tramways Company), Bray, M.R.C.V.S. (London Road Car Company), A. Mills (Secretary of the Metropolitan United Cab Proprietors' Protection Association), W. Hunting, Messrs. W. Chapman, Lane, T. J. Ash, J. Howe, W. S. Birch, J. G. Emmett, J. Griffiths, Moses Smith, Ball, and T. Holder, and other gentlemen representing the cab and omnibus interest.

Letters expressive of regret at inability to attend, and of sympathy with the object of the meeting were read from Messrs. T. Tilling, W. Mead, J. R. Cox and C. Sheather.

The Chairman, in opening the proceedings, said he had no doubt that all of them had noticed that when water fell upon a tray separate globules ran about in their endeavour to coalesce. At first two would join, then three and four, and ultimately all the individual drops would form a united mass. The same process occurred in all movements of a public character, whether social, political, philanthropic or commercial. Men scattered here and there over the whole country might be thinking the same thing, but whilst they were thinking and acting individually they were unable to exercise much influence upon the public. Eventually, perhaps, two men met, and in talking discovered that they both held the same views, subsequently they met others of like opinions and, in the end, a meeting such as the present was formed. For that result they were primarily indebted to Mr. Hunting, who had taken the initiative, united the individual drops and brought about that influential gathering which would probably influence the settlement of a question of greatest importance to all horse-owners in the country. The directors of the London Road Car Company, of whom he was one, had for some time past been considering the desirableness and expediency of the government granting compensation

for suffering horses, destroyed in the public interest. Three or four weeks ago they requested Mr. Duff, the manager of the company, to prepare a letter on this subject with a view to its being sent to the Rt. Hon. Henry Chaplin, the Minister of Agriculture. Owing to pressure of business there was some delay in the board's considering the letter which Mr. Duff had drafted, and then they received a notice convening this meeting. Hence they decided that they would not take any independent action in the matter but would fall into line with Mr. Manley Birch and Mr. Holder and others. They could not but believe that a united effort on the part of horse-owners was preferable to individual and isolated action. (Hear, hear). The importance of the question before them could not be over-rated. There was an article, which many of them might have seen, an article reprinted from *The Veterinary Record*, in leaflet form, on the subject of stamping out glanders by giving compensation for farcy. The writer showed how in one year—1890—the horses lost through glanders in Great Britain were 1,808 or a larger number than was annually required to maintain the remounts of the British Army. Further, he pointed out how the British Army had, during the last three years, succeeded in remaining clear from that dreadful disease—glanders. It was a known fact that the Government paid various horse-owning companies 10s. a year per horse, so that they might use them at a time of war or of national emergency. He (Colonel Colville) asked them to imagine what would be the position of the British Army when having completely rid itself of glandered or farcied horses, it collected horses from various yards in London and the country. In that case farcy and glanders would be immediately reintroduced in the military stud, and hundreds of horses would be lost at a time when they were most needed. Then, when the war or crisis was over, it would take years and involve terrible anxiety and expense to again completely eradicate the horrid disease. Hence this question was important to horse-owners, to the Army, and to the country, which depended upon the efficient and adequate equipment of the Army for its protection and defence. And if there was an outbreak of glanders in the circles he had mentioned—an outbreak extremely likely—the loss of the horses might not only be a national danger but the national exchequer would be heavily burdened in their replacement. It was quite time that some one moved in this matter, and he congratulated the conveners and promoters of that meeting upon securing the attendance of so many influential gentlemen. That was a beginning, at all events, towards pressing the subject upon the attention of the Government. (Applause). He suggested that the several resolutions should be moved seriatim and that discussion should follow upon the whole.

Mr. W. HUNTING moved:—"That this meeting is assured that by proper regulations it is quite possible to stamp out glanders and farcy; and that it is necessary to do so for the safety of human life as well as for the national welfare."

To support this proposition he had, he said, first to show that there was a reasonable probability of success and secondly to prove that if was worth while doing. At present the law enforced the immediate *slaughter* of all cases of glanders but only required the *isolation* of farcy. The law ordered the immediate notification of either disease in a stable but for some reason only compelled the extermination of one. This law had been in force ever since 1870, but glanders showed little evidence of decrease and when we recognised the fact that farcy and glanders are only forms of the same disease, both due to the same poison and each capable of spreading the other, we could quite understand why failure had attended the Government regulations. When farcy is stamped out as rigorously as glanders we shall get rid of both forms of disease. The fact that glanders and farcy are scheduled in the Contagious Diseases (Animals) Act is evidence that the State recognises their evil and also their nature as contagious plagues. The fact that farcy is permitted to be treated is evidence that the authorities recognised a hardship in its compulsory slaughter. We object, however, to the hardship being met by negligence, and suggest that it should be provided for by some regulation which whilst not causing hardship would effectually check the disease and lead to its entire removal from the country.

Glanders and farcy are diseases which only spread by contagion. Like cattle-plague, foot-and-mouth-disease and the lung disease of cattle they never arise from any cause except the infection from a previous case. Like those diseases of cattle then, these diseases of the horse can be stamped out by compulsory slaughter. Over and over again glanders and farcy have been stamped out from large studs of horses—in the majority of cases only to regain entrance by the purchase of an infected horse. It is absolutely necessary to stop the spread from stable to stable, and as this is due to the sale of animals suffering from a latent form of infection we must provide against such animals being sold. The majority of these animals are the "cured" cases of farcy which we ask to have destroyed. When this is done we believe we shall have "proper regulations" and that then it will be "quite possible to stamp out glanders and farcy."

It is now quite lawful to "patch up" cases of farcy and we cannot be surprised that poor men whose living is at stake do so. Rich proprietors refuse to do this, and at enormous expense to themselves kill all contagious cases. Why should the rich man sustain this loss for other people, and why should the poor man ruin himself to protect others from injury? The State should take the burden, or at any rate share it, and this is why "compensation for farcy" is now proposed. Here is a common case—A man owning fifty horses dies and his executors sell the stock. The owner had had perhaps two or three cases of glanders and farcy during the last year, the latter, being treated, apparently recovered. The sale takes place and the horses are dispersed into healthy studs all over the district; probably ten or twelve out of the fifty sold develope the disease in a week or two, and thus infect fresh stables, and help to ruin the new owner by a disease against which no precaution he can take is of the slightest avail. We desire to prevent this. We ask for compensation not so much to reward the man who suffers as to prevent injury to others. Compensation would cause the early detection of every case and its immediate destruction, so that no latent disease would be left to spread infection. (Hear, hear).

Of course all government regulations against contagious disease require a good deal of trouble and expense to carry them out. Is the trouble and expense as applied to glanders necessary? We believe it is, and for the following reasons. First—Glanders is communicable to human beings and therefore should be stamped out just as actively as Rabies. Secondly—The loss from glanders is very serious. Every year we lose 2000 horses from this cause, and their money value to the country is at least £30,000. We have all heard of the difficulty there is in obtaining remounts for the Army, which requires every year about 1600 new horses. The loss of horses from glanders and farcy is then greater than the number required annually to remount our Army. But the loss is not fully represented by the mere value of the dead horses. We must add to that the loss of work, the loss of efficiency the cost of *food and treatment* which often occur prior to the distinct development of the disease—probably another £10,000 a year. This loss is not comparable to such losses as result from accidents which no laws can regulate or prevent; on the contrary it is due to a disease which government regulations can eradicate, but which no private

effort of individuals can guard against. There is one more reason why we say it is necessary to stamp out these disease. For three years the British Army has remained free from the Plague. At much expense and by the aid of a staff of highly trained veterinarians the result has been achieved only after years of effort. All of us desire that the Army should remain free, and thus preserve its efficiency. If glanders be permitted to remain in civil stables nothing is more certain than that the army stables will again become infected the first time that, either from war or peaceful manœuvres, any large number of new purchases are made. Some years ago these were extensive autumn manœuvres on Salisbury Plain and large numbers of extra horses were required and purchased—glanders appeared, and not only caused many deaths but infected the cavalry regiments. When the manœuvres were over an economical goverment, setting an example to poor horse-owners, sold the superfluous horses, and these sales spread glanders all over England. Surely nothing more need be said to show the expediency—the necessity—of stamping out this disease. He Mr. Hunting claimed, that in the interests of human life, in the interests of all horse-owners, in the interests of the British Army, and for the general welfare of the nation, every effort should be made to induce the government to stamp out glanders and farcy by the compulsory slaughter of both forms of the malady. (Applause.)

Mr. J. Manley Birch proposed: "That no legislative measures can ever be successful in eradicating glanders, which permit the existence of horses suffering from farcy."

He said it had long been a conviction of his that farcy, as an agent in propagating and spreading the disease amongst working horses, was far more dangerous than glanders itself. The very name of glanders was terrifying, and the owner of a horse thus attacked hastened to have it destroyed at once; but few people were aware that farcy and glanders were practically the same disease. The great danger and risk of farcy was that it was amenable to treatment, and it was thought by some people that it might be subdued and eradicated. Personally he did not believe that it could be cured, although it might be subdued, driven inwards and all outward symptoms of it might disappear. A horse in that state, and apparently in a good healthy condition, might be sold, and he was convinced that the disease was spread very much by such sales. He believed that in nine cases out of ten they thus bought the disease, and, in his mind, there was no doubt that the only way of effectually getting rid of glanders or farcy was by the adoption of the stamping-out process. Personally he had had to stamp out these diseases to his serious loss, and other gentlemen present might similarly have suffered. There was every temptation for a man who was not wealthy, or in a prosperous way of business, to attempt to gloss over or hide the ailments of his horses. The law did not compel the destruction of farcied horses, and so long as the disease could be apparently eradicated for a time so that the animal might be sold, this would very often be done. One infected animal was, as they knew, enough to infect a whole stock. He thought the matter was one of such vital importance—of such national importance—that the evil needed only to be pointed out to the Government to induce them to supply the effective remedy. He considered that the owners of farcied horses, which were destroyed, were as much entitled to compensation for the loss they sustained as the owners of cattle slaughtered because of pleuro-pneumonia.

Mr. D. McGill moved the third resolution, which was: "That the compulsory slaughter of horses suffering from farcy is unjust to the owner unless compensation be paid."

He said that some twelve years ago he came to London to take charge of one of the largest studs of horses in the metropolis, and was astonished to find that at least 20 per cent. of them were infected either with farcy or glanders. For years previously he had held the opinion that the only way to eradicate glanders was also to eradicate farcy. (Hear, hear.) His directors empowered him to do what he thought fit, and he killed every animal which had the slightest taint of disease so far as he could detect. He was happy to say that now there was no purer stud in London than that owned by the London Tramways Company. Farcy was a treacherous disease. A horse might show symptoms of farcy now, and a month hence betray no outward symptoms at all, but in another month there might be developed a malignant case of glanders. He mentioned an instance of this which came under his own observation. A cab-owner, in a small way, claimed from the London Tramway Company £15 for injury to his horse; and when he (Mr. McGill) went to see it he found it was suffering from farcy. Mentioning the fact to the owner, he replied, "Oh! yes; he has had that for a month—but it is nothing." The man evidently could not afford the destruction of the horse. Two months afterwards he (Mr. McGill) saw the horse again, at work and apparently in a perfectly sound condition; but a few days afterwards the same horse was brought to the slaughterer's yard to be killed, having developed into the worst possible case of glanders. It was no use to expect poor men to kill farcied horses so long as they could be patched up, and possibly sold, or worked for many months. It behoved the Government to step in and compensate those whose horses it was necessary to destroy in order to stamp out farcy and glanders. The reason it was proposed to destroy all farcied horses was that only by so doing could glanders be stamped out. The destruction of these horses was desired for the national good and to prevent loss to *other* people; compensation to the owner was for the benefit of *others*. At present an owner has his choice between selling or working a "patched-up" case of farcy. We propose to take from him his horse and to pay him for his loss on the same principles as are applied in all cases where the individual suffers for others benefit. They were all indebted to Mr. Hunting for having taken the initiative in this movement. (Applause.)

Mr. W. Chapman moved the subjoined resolution: "That the co-operation of all horse-owners be invited to obtain from Government similar compensation for horses to that now paid for cattle; and that a committee be formed to bring the matter before the Minister of Agriculture."

He said there was more reason why a cabowner in a small way should be compensated for the loss of a horse that cost him perhaps £20 than that compensation should be given to the owner of a bullock or cow destroyed because of lung disease. In the latter case the carcase of the beast was still of value for human food, but the cab-owner's loss was complete, and he got nothing for his dead horse.

The Chairman said they were then at liberty to discuss any or all of the resolutions proposed; and, after the discussion, he assumed that they would strike while the iron was hot and appoint a provisional committee, with power to add to its numbers, to obtain the co-operation of others interested in the matter, and to convene another and a larger meeting at which a deputation might be appointed to wait upon Mr. Chaplin, the Minister of Agriculture.

Mr. Jos. Lane remarked that there was a great temptation for cab-owners, in the existing state of the law, to sell horses which they knew to have had farcy and thus spread the disease. This ought to be prevented.

Mr. T. Holder thought that if they then elected a provisional committee as suggested that committee would be able in a month to get together at another meeting all the large horse owners in London.

Mr. BRAY, veterinary surgeon to the London Road Car Company, related an incident which came under his notice while he was a student at the Royal Veterinary College. He thought it was conclusive as to the danger of glanders to human life. He saw a costermonger freshening his watercress in a cattle trough at St. Pancras. A minute or two before he had seen a horse drink from the same trough which, in a few days, was brought to the Veterinary College suffering from glanders.

Mr. ATKINSON called attention to the fact that among the poor of London a large amount of horse flesh was consumed, and only the previous week he came across a number of boys eating cats' meat. It was necessary that those people should be protected from a preventible disease.

Mr. J. FARMER contended that all veterinary surgeons should be appointed inspectors under the Contagious Diseases (Animals) Act, and should be compel ed to report every case of farcy as well as of glanders which came within their cognizance. There was an Infectious Diseases (Compulsory) Notification Act in the case of human beings, and why not a similar law in the case of beasts. Of course he was favourable to the award of due compensation in the event of the destruction of a man's property for the public benefit.

Mr. J. W. DOLLAR said he was in perfect accord with the first two resolutions, the views contained in which had had the support of veterinary surgeons for many years past. He should direct his observations to the third resolution which embodied the principle of compensation. Where was the compensation to come from? He would consider some of the arguments which were likely to be advanced against the principle of compensation on the part of the State. Compensation was intended in some measure to recoup the individual for a sacrifice imposed upon him by the many for their own advantage. Compensation was not given to the individual for a primary loss, a loss by the hand of God, nor a loss the result of his own carelessness, but only for a loss which the law inflicted over and above the original loss. Owing to a want of knowledge on the part of the law (or of medicine) more must be destroyed than was absolutely necessary, and for this the law paid. Thus if a herd were attacked with pleuro-pneumonia or cattle plague, or a pen of swine with swine fever, the whole were destroyed because no one could tell exactly how many were affected; and, although some might have been saved, the public demanded that an end might be made of them and disease too. But here a difference arose between cattle or swine and horses, for he did not think any of them would advocate the slaughter of a whole stablefull of horses on account of a single case of glanders. He invited them to consider how the principles he had named worked when applied to the measure gentlemen then advocated. In the first place, he thought it was very generally agreed that glanders and farcy were contagious, *i.e.*, they were propagated by contact, but he did not think they had any final evidence that they were infectious, *i.e.*, spread through the air. Hence if their stock was healthy and they guarded it against contagion, it would remain healthy. Again, it was generally allowed that glanders was seldom seen in good studs, where horses were well fed and housed and fairly worked. Thirdly, farcy was a disease which was readily recognised at a fairly early stage, and was not excessively rapid in its rate of propagation. Glanders was more insidious. Considering all these facts he could not help thinking that Mr. Chaplin would say to them: "I very greatly regret it but this is in no way a case for compensation. The law only compels you to destroy what is already lost—it only hastens the end. No horse is ever cured of glanders; and, in forcing you to destroy your infected ones, we are saving you from loss—not inflicting it. The disease would cease to be widespread and frequent if you gave proper attention to diet, work and general health, and ought really to cause you no more loss than inflammation of the lungs or bowels. This is an ordinary business risk, and if we compensate you for loss by it we must compensate you for broken legs, common colds, and treading on tin tacks." (Laughter). He (Mr. Dollar) had made no reference to taxation. At present the consolidated fund provided, he believed, the money required by the compensation clauses of the Contagious Diseases (Animals) Act. This came out of every one's pocket. The burden of taxation was already sufficiently severe and became heavier every year. It was opposed to all right and justice to tax the general public for the benefit of a small section. He would suggest that if the project they had met to discuss that night was in any way to be advanced, it must be by private combination and a proper system of insurance.

The CHAIRMAN said they were much obliged to Mr. Dollar for putting the other side of the question, and telling them what Mr. Chaplin might say, but it did not follow that his prediction would be realised. (Hear, hear and laughter).

Mr. HUNTING said Mr. Dollar's objections had been thought of by them before. Mr. Dollar argued against the principle of compensation, he forgot that the Government had recognised it in many diseases. Governments did not act upon abstract principles but were guided by practical expediency. The question narrowed itself to this: could they get rid of the disease, and was it worth stamping out? Mr. Dollar proposed that each individual should stamp it out himself. Very right if all men were able to do so, but were they, or were they even willing if able? Provision and allowance had to be made not only for honest men, but for dishonest men, men who were ignorant, and men who were poor. Such men could only be met by the law making it worth their while to destroy a farcied horse. They did not ask the Government to compensate them in cases of loss from glanders. When a man had a glandered horse on his premises it was his interest to get rid of it as soon as possible—the sooner the better. They asked for compensation for farcied horses only. He thought Mr. Dollar agreed with him that, by the adoption of proper measures, they could stamp the disease out. Had Mr. Dollar conceived any better method of getting rid of the disease than by the compulsory slaughter of all cases of glanders and farcy, and by granting compensation for farcied horses? Did Mr. Dollar advocate slaughter of farcy without compensation. It was only by allowing compensation that they could get every case of farcy reported. Without this an army of inspectors would be required to detect every case in its first stages. Compensation would afford a cheap means of getting rid of the disease, and it was the only practical and effectual method that occurred to him. (Hear, hear).

THE CHAIRMAN said Mr. Dollar seemed to forget the poor man whose one horse was the only wealth he possessed; and who could not afford to dispense with its use as long as it could work at all. Compensation in such cases was surely necessary, but the great point was the protection of healthy studs by eradicating the disease, and the preservation of the health of the Army's horses which might be accomplished at a cost of £10,000 a year at the utmost, and thus perhaps save the country £100,000 in certain eventualities. In the case of farcied horses, they asked the Government to afford an inducement for their destruction which would be powerfully operative in averting the spread of disease, and thus be a great step towards its extinction.

The several resolutions were then adopted; and it was proposed to appoint a provisional committee empowered to add to its number, with Mr. W. Hunting as honorary secretary.

Mr. PRICE moved and Mr. DOLLAR seconded, by way of an amendment, the adjournment of the meeting. Only

those two gentlemen voted for the amendment, and the original motion was carried, the following gentlemen being appointed on the committee:—Colonel Colville, Mr. McGill, Mr. Chapman, Mr. Moses Smith, Mr. Scott, Mr. R. Tilling, Mr. W. Hunting, Mr. J. M. Birch, Mr. T. Holder, Mr. Martin, Mr. A. Mills, Mr. J. Howe, Mr. S. Taylor, Mr. Emerton, and Mr. Ash.

The meeting ended with a cordial vote of thanks to the chairman.

EXTRACTS AND NOTES.

A PRETTY QUARREL.

On October 24th we extracted a paragraph from *The North British Agriculturist* in which a distinct statement was made that Professor Williams' view of the American pulmonary disease had been shown to be correct by M. Nocard. This week the *N.B.A.* publishes a letter from Professor McFadyean:

PLEURO-PNEUMONIA.

SIR,—In last Saturday's issue of *The Veterinary Record* I observe an extract from your columns entitled, "The Recognition of Pleuro-Pneumonia," in which, after referring to the alleged discovery of that disease in American cattle landed in this country, you say, M. Nocard 'has made an exhaustive examination of the whole subject, and he has been driven to the conclusion that Professor Williams has been right all along, and that his critics have been altogether wrong.' Read in connection with the preceding portion of your remarks, that is equivalent to stating that Professor Nocard has expressed the opinion that the veterinary officers of the Board of Agriculture were in error when they asserted that American cattle landed in Deptford in April last were the subjects of pleuro-pneumonia, and that Professor Williams is right in maintaining that no lesions of pleuro-pneumonia have been discovered in the lungs of imported American cattle. Will you allow me, through your columns, to say that there is not a word of truth in that statement. Professor Nocard has never made any investigation bearing on the point in dispute, and he has expressed no opinion, direct or indirect, as to whether Professor Williams was right or wrong. Professor Nocard did discover in several United States cattle exposed in the Paris market last winter a malady which is well known to American stock-owners and veterinary surgeons under the name of 'corn-stalk disease,' and a note of his observations is published in a recent number of the *Recueil de Médécine Véterinaire;* but, as he is not only a distinguished investigator, but also a person endowed with common sense, he did not conclude from that discovery that United States cattle are free from pleuro-pneumonia, or that no animals affected with pleuro-pneumonia had been landed in Great Britain.

J. MCFADYEAN.

To this the *N.B.A.* replies by saying that they obtained their information from *The Veterinary Journal*, and that "a statement deliberately made by Dr. George Fleming, whose eminence and accuracy as a veterinary authority will not be challenged even by Professor McFadyean."

This is indeed rich, and shows that the writer knows very little of the veterinary profession and its authorities.

Another Veterinary Honour.

Le Journal Officiel du Gouvernement Egyptien contains the following:

"Dans l'ordre imperial du Medjidieh.—Au grade de commandeur (3me classe): M. William Littlewood, inspecteur vétérinaire en chef des Services Sanetaires et d'Hygiene Publique."

Mr. Littlewood graduated in 1885.

CORRESPONDENCE.

OUR TITLE.

SIR,

In your comments in last weeks Record on "The title of Veterinary Surgeon," you apologise for taking an opposite course—which you are quite entitled to do—to what seems to some of us to the best interests of the Body Corporate. It is not the only instance in which you champion the cause of others than the Body Corporate. In your report of the proceedings of the last meeting of the Council published on 24th inst., page 220. You moved that a certain registered practitioners name who had been convicted of embezzlement, should not be struck off the Register. A clemency which probably would not have been asked for a M.R.C.V.S.

I am compelled to join issue with you in your statement that existing practitioners had used the title of Veterinary Surgeon for years before the passing of the Act. As a matter of fact they did not use the title until after the Act was passed. Members of the R.C.V.S., all over the country can verify this statement.

It is my intention to bring this question before the Council, after the proposed New Charter—or rather the petition for—has been sent to the Privy Council.

Nov. 2nd, 1891. Yours etc., H. KIDD.

[Our note last week was not an apology, it was an explanation offered from a feeling that it was just possible there might be one or two members who would not understand the position. Mr. Kidd's letter is evidence that it was not unnecessary. Now that the matter is to be brought before the Council it is perhaps inexpedient to say more.—ED.]

DEAR SIR,

I am sorry I cannot see things as you see them nor put the same interpretation upon them, I hope threfore, you will grant me another corner in *The Record*, and I shall be as short as I possibly can. I think that the chapters and verses quoted by you tend much more to disprove than prove your case. In my letter of last week, I asked five questions, and you have only answered one of them satisfactorily, viz. the first, that the Charter of 1844 did give us the exclusive right to the title "Veterinary Surgeon." This being so, and the Charter remaining still

unrevoked, surely then we must have the same right now as formerly. How could it be possible for any Legislature or Act of Parliament to give to a third party, that which they did not possess themselves, and which was the exclusive property of another party, it having been previously conveyed to them? With regard to "the Register" I can only find two lists—one the list of Members of the R.C.V.S., the other a list of "Existing Practitioners." The former together with those holding the Certificate of the Highland and Agricultural Society, form "the Register of Veterinary Surgeons," these being the only persons who have a right to be called such. The latter, according to Section 15 of the Act of 1881, "is not on the Register of Veterinary Surgeons," but "he shall be entitled to be placed on a separate register under the heading of "Existing Practitioners." "This does not mean that he is to be a Veterinary Surgeon, or else it would say so; he is not even to be called a "Veterinary Practitioner" but an existing one, thus carefully avoiding the use of our title. If "Existing Practitioners" are "Veterinary Surgeons" as you say they are, why should they not enjoy the full benefit and be put upon the proper list? In the part of Section 17 quoted by you, I fail to see where the distinction is drawn between Veterinary Surgeons and M.R.C.V.S, "a person who for the time being is on the Register of Veterinary Surgeons," and taken with what follows and precedes in Section 15, clearly means M.R.C.V.S. because at the time of framing the Act there was no other list in existence.

The fact of a person's name being on the list of "Existing Practitioners," does not give him any qualification, it is of no avail in a Court of Law, it will not give him an entrance into the Army, neither does it entitle him to assume the title of Veterinary Surgeon, but merely allows him to earn a living by practising—anything more would be quite unfair. Acts of Parliament ought to be fair and just, and if ours is not it should be made so. I do not agree with the sentiment expressed in the latter paragraph of your letter. I think it would be better for us to take the advice of the Parson, who told his people "take as much as they could get and always strive for more."—I am, yours faithfully,

Oxford, 4th Oct., 1891. JAS. P. S. WALKER.

DEAR SIR,

After a careful perusal of the Act, I can find nothing in it granting Registered Practitioners the title of Veterinary Surgeon. But I find in Section 15 that all persons in the United Kingdom who wished to be entered as registered practitioners should have been practising for not less than five years previously; and I am confident that many of the men entered never practised until they made application for registration. What about Section 11 as applicable to those men?

Although some men, naturally unsuited for practising Veterinary Surgery, have by dint of perseverance and a good memory succeeded in obtaining the Diploma of membership and have afterwards proved failures, yet that does by no means prove that the qualified V. S. is not far superior to the Registered Practitioner. Men are not of equal abilities in any profession.

When "Hereditary Vet." asks his professional brethren to look up to these Registered men in difficult cases where, as he says, their ounce of practice is worth our pound of theory, he only shows that he himself may have found such to be the case, but does not at all prove that qualified men as a rule are in such a pitiable condition.

After a long experience as a country V.S., I have in many cases found the total inability of these so-called "practical men" to deal successfully with difficult labour cases, whether equine or bovine.

It is suggested that these registered men *may* be "too competent rivals." Granted, so far as imposition upon the public and unbounded impudence are concerned. Certainly not in professional skill.

A SUBSCRIBER.

A CONSULTATION OR A CHAT?

DEAR SIR,

Though not very sure whether I am trespassing too far, or in a wrong direction on your good nature, I should like to ask a few questions, and your opinion on a subject which may perhaps be of interest to the profession generally.

In the middle of September I was visited by an officer of the R.S.P.C.A. with his solicitor, and was asked a number of questions on the subject of branding calves, the consultation lasting about 20 minutes. After my opinions on the subject in general, had been elicited, a specific case—the grounds of a local prosecution then pending, was laid before me; and, presumably, it was with the object of enlisting my aid in the matter that I was subjected to this pumping process. My opinions on the particular case in question were evidently of no avail to the officer in his object, and he departed without further comment, and no hint as to remuneration.

I sent him a bill for 10/6 for the consultation, and in reply have a letter from the officer that he has "been directed by Mr. Colam not to pay my account, *as my claim is absurd.*"

Now the questions I would ask are—

I. Am I justified in sending in my bill for the consultation, or is my claim "absurd."

II. Is 10/6 a proper charge, or too much; if so, what ought the fee to be.

III. Is there any Act, or clause in our Constitution, entitling us as a profession to charge for advice, as such, and not, as represented by manual labour or medicine.

I am told by a legal friend that the Medical Profession are by law entitled to such fee, and the amount prescribed.

This "no cure, no pay," principle, is a common mode of procedure with the Society, and the point has interest in other relations.—Yours faithfully,

Mold, Nov. 3rd, 1891. EDWD. P. EDWARDS.

[We consider you entitled to a professional fee.—ED.]

J. H. STEEL MEMORIAL.

SIR,

I have great pleasure in acknowledging with thanks the receipt of £5 5s., from the Edinburgh Veterinary Medical Society. I beg also to thank Prof. W. Williams in the name of the Committee, for his kindness in bringing the Fund to the notice of the Students of his College.

Woolwich, 5th Nov., 1891. F. RAYMOND, *Hon. Sec.*

COMMUNICATIONS, BOOKS, AND PAPEES RECEIVED: Profs. Penberthy, F. Smith, Messrs. W. A. Hancock, F. Hobday, H. Kidd, B. Bryan, T. Greaves, E. P. Edwards, E. McNish, "South Country," "A Subscriber," "A Member," "Sussex Daily News."

(Several of these together with notes upon the Report of the A.V. Deptnt. are unavoidably held over).

Original articles and reports should be written on one side only of the paper, and authenticated by the names and addresses of the writers, not necessarily for publication.

Communications for the Editor to be addressed 20 Fulham Road, S.W.